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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,352	03/29/2001	Masanori Taketsugu	00USFP605	2734

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EXAMINER	
SHEW, JOHN	
ART UNIT	**PAPER NUMBER**
2664	

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/820,352	TAKETSUGU, MASANORI	
	Examiner	Art Unit	
	John L Shew	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-6 and 8-17 is/are rejected.

7)☒ Claim(s) 7 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 032901, 070301.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

Page 31 line 1 cites "PD20" should be "PD30".

Page 31 line 5 cites "PD20" should be "PD30".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Lim.

Claim 1, Lim teaches a mobile communication system (Abstract lines 1-7) referenced by a mobile radio communication network, comprising a mobile terminal (FIG. 2, column 1 lines 34-36) referenced by the Mobile Station, a radio access network (FIG. 2, column 1 lines 34-36) referenced by a Radio Access Network, which comprises a radio base station (FIG. 11, column 23 lines 20-23) referenced by Base Station/Mobile Switching Center, which carries out packet communication with said mobile terminal through a radio channel (column 9 lines 4-11) referenced by the Mobile Station registration through a connection via radio Traffic Channel, and a radio channel control station which controls said radio base station (FIG. 3a, FIG. 4, column 5 lines 49-5) referenced by Base Station Controller1, and a home agent which stores data transmitted from said mobile terminal (FIG. 11, column 23 lines 20-44) referenced by the Home Agent receiving registration data from the MS, and associated with a current position of said mobile terminal (FIG. 11, column 23 lines 20-44) referenced by Mobile IP registration which includes IWF/Foreign Agent location information, wherein the packet communication between said mobile terminal and said radio channel control station is controlled based on radio channel control of packet switching connection (FIG. 11) referenced by the Traffic CHannel and Radio Link Protocol Setup procedures, and the packet communication from said core network to said radio channel control station is controlled based on mobile IP (mobile Internet protocol) (FIG. 11, column23 lines 20-44) referenced by Mobile IP registration process with uses the Mobile Internet Protocol.

Claim 2, Lim teaches wherein said home agent receives packet data destined to said mobile terminal once (FIG. 11) referenced by line h2 reflecting the data from the Internet to the Home Agent, and transfers the packet data to said mobile terminal based on the stored data associated with the current position of said mobile terminal (FIG. 11) referenced by line h2 reflecting the data transfer using tunneling to the location of the destination Foreign Agent and ultimately to the Mobile Station.

Claim 3, Lim teaches wherein said home agent is provided in a core network which carries out call control of said mobile terminal (FIG. 2, column 1 lines 34-67, column 2 lines 1-24) referenced by the Home Agent controlling packet traffic from the Internet to the Mobile Station.

Claim 4, Lim teaches wherein said home agent is provided on the Internet between said radio access network and another radio access network (FIG. 2, FIG. 4) referenced by the connection of the Home Agent to the Internet and also the connection of the Home Agent to the Radio Access Networks via multiple InterWorking Function/Foreign Agent units.

Claim 5, Lim teaches wherein said home agent is provided in said radio access network (FIG. 2, column 1 lines 34-58) referenced by the home agent in communication to the Mobile Station via a Radio Access Network.

Claim 6, Lim teaches wherein said home agent comprises a mobile IP module which stores the data associated with the current position of said mobile terminal (FIG. 11, column 23 lines 20-44) referenced by step h2 where the HA transmits data to the MS using Mobile IP which inherently implies the HA has an Mobile IP module or equivalent to perform such function and further the establishment of the communication via the location of the FA establishes the HA carries position information of the MS, and an IP module which encapsulates the packet data received from a correspondent node (FIG. 11, column 16 lines 4-7) referenced by the HA encapsulation of data destined for the Mobile Station from the correspondent node of the Internet, generates encapsulated packet data having the data associated with the current position of said mobile terminal as an destination address (FIG. 11) referenced by line h2 reflecting tunneling data from the HA destined for the Mobile Station via the location of the FA, and transmits the encapsulated packet data to said mobile terminal (FIG. 11) referenced the HA tunneling data to the Mobile Station.

Claim 8, Lim teaches wherein said radio channel control station comprises an IP module which decapsulates the encapsulated packet data which has been transmitted from said IP module of said home agent (FIG. 11, column 16 lines 4-7) referenced by line h2 where the Foreign Agent received the encapsulated tunneled data from the HA which implies a decapsulation process for the tunneled data, and transfers the extracted packet data to said mobile terminal (FIG. 11) referenced by line h2 where the FA transmits the Mobile IP TCP/IP communication data to the MS.

Claim 9, Lim teaches wherein said mobile terminal comprises a mobile IP module which transmits the data associated with the current position of said mobile terminal to said home agent (FIG. 11, column 2 lines 18-24) referenced by line f2 reflecting Mobile IP registration between the MS and the HA which carries the location of the FA through Care Of Address for tunneling.

Claim 10, Lim teaches wherein said mobile terminal comprises a radio channel control module which transmits the data associated with the current position of said mobile terminal (FIG. 11) referenced by line f2 reflecting the Mobile IP registration process between the MS and the IWF/FA which is incorporated into the functions of the BS/MSC thus transmitting current position to the radio channel control of the Base Station, and said radio channel control station comprises a radio channel control module which receives the data associated with the current position of said mobile terminal and converts to transmit to said home agent (FIG. 11) referenced by line f2 reflecting the Mobile IP registration process between the IWF/FA inclusive of a BS radio channel control module and the HA which carries the data associated with the current position of said mobile terminal.

Claim 11, Lim teaches wherein said mobile terminal transmits the data associated with the current position of said mobile terminal (FIG. 11) referenced by line f2 reflecting the Mobile IP registration process, in response to a position control notice signal from said

radio channel control station (column 1 lines 43-48) referenced by the IWF/FA transmission of an agent advertisement using MIP to the MS.

Claim 12, Lim teaches a control method in a mobile communication system (column 1 lines 10-33) referenced by control of Internet packet service to a Mobile Station in a mobile radio communication network, comprising the steps of (a) transmiting user data for position registration of said mobile terminal to a home agent of a core network via a radio channel control station (FIG. 11) referenced by line f2 reflecting the Mobile IP registration which transmits user data for position registration of the MS to a HA of a core Internet via a Base Station/Mobile Switching Center, (b) registering the user data be said home agent (FIG. 11, column 1 lines 49-56) referenced by line f2 where the Home Agent receives and processes the Mobile IP registration data.

Claim 13, Lim teaches (c) establishing a channel between a mobile terminal and a radio channel control station (FIG. 11) referenced by line c2 reflecting a Traffic Channel setup between a MS and a BS, and wherein said (a) transmitting step comprises the step of transmitting the user data to a home agent of said core network via said radio channel control station using the established channel (FIG. 11) referenced by lines c2 which establishes the traffic channel and followed later in time by line f2 in which the Mobile IP registration process transmits user data to the HA via the BS.

Claim 14, Lim teaches wherein said (a) transmitting step comprises the steps of (d) converting the user data into a control signal by said mobile terminal (FIG. 11, column 1 lines 43-48) referenced by the IWF/FA transmission of an agent advertisement control signal and the MS transmitting an agent solicitation message control signal which includes MS data, (e) transmitting the control signal to said radio channel control station (FIG. 11, column 1 lines 43-56) referenced transmission to the BS for the IWF/FA to initialize the FA registration of the Care Of Address, (f) reproducing the user data from the control signal (column 1 lines 43-48) referenced by the identification of the MS in the registration, (g) transmitting the reproduced user data to said home agent (column 1 lines 43-67) referenced by the Mobile IP registration at the HA inclusive of the MS home addresses of the MS HA and FA.

Claim 15, Lim teaches wherein said (a) transmitting step comprises the steps of (h) transmitting a control signal indicating the user data to said radio channel control station (FIG. 11, column 1 lines 43-48) referenced by the IWF/FA transmission of an agent advertisement control signal and the MS transmitting an agent solicitation message control signal which includes MS data, (i) converting the control signal into the user data by said radio channel control station (column 1 lines 43-48) referenced by the identification of the MS in the registration with the IWF/FA for MIP registration with the HA, (j) transmitting the user data to said home agent (FIG. 11) referenced by line f2 reflecting the Mobile IP registration which transmits user data for position registration of the MS.

Claim 16, Lim teaches wherein said (a) transmitting step is carried out in response to a position control notice signal from said radio channel control station (FIG. 11, column 1 lines 43-48) referenced by the combined BS/MSC IWF/FA transmission of an agent advertisement control signal and the MS.

Claim 17, Lim teaches wherein communication between said mobile terminal and the radio channel control station is carried out based on radio channel control of packet switching connection (FIG. 11) referenced by line c2 which establishes the radio packet connection between the MS and the BS/MSC, and communication from said core network to said radio channel control station is carried out based on mobile IP (mobile Internet protocol) (FIG. 11) referenced by line h2 reflecting communication between the MS and the Internet using Mobile IP.

Allowable Subject Matter

3. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Citation of Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent 6549522, Flynn discloses mobile data rate enhancement via foreign agent balancing. Patent 6771609, Gudat et al. discloses a method for dynamically updating a propagation model. Patent 6407988, Agraharam et al. discloses mobility support services using mobility aware access networks. Patent 6636498, Leung discloses a mobile IP mobile router. Patent 6795857, Leung et al. discloses an apparatus for providing mobility of a node that does not support mobility. Patent 6684256, Warrier et al. discloses a routing method for mobile wireless nodes having overlapping internet protocol home addresses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Shew whose telephone number is 571-272-3137. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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